ABSTRACT OF THE DISCLOSURE

The present invention provides a circuit pattern edge inspection method of finding out a failure in a fabricating process and image distortion in an observing apparatus by analyzing, by a non-destructive inspection, the shape of an edge of a line of a fine pattern in which characteristics of the material, process, and an exposure optical system in a semiconductor fabricating process appear, and performing analysis quantitatively. The method includes a step of detecting a set of edge points indicative of positions of edges of the pattern in a two-dimensional plane by a threshold method; a step of obtaining an approximation line for the set of edge points detected; and a step of obtaining an edge roughness shape and a characteristic by calculating the difference between the set of the edge points and the approximation line. A plurality of values are used as thresholds used for the threshold method.